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ABSTRACT

A study gathered data about the career and professional development of experienced postsecondary vocational education instructors of the technical institutes (TIs) of Minnesota. Data were collected from 284 (of a sample of 394) subjects who had been employed for 8-12 years during the 1981 and 1982 school years and who would have had 13-17 years of experience as of the 1986 and 1987 school years, when the study was conducted, had they remained in service. Respondents were divided into those still employed and those not employed in the TIs. The group that stayed in vocational education was significantly younger when they entered the field than the group that left. The group that stayed rated both the work environment and the opportunity to work with students as significantly more important factors, when asked to rate which of 11 factors had originally attracted them to the field. Vocational field membership was significantly related to attrition from vocational education: proportionately more people in business and office and trade and industrial education remained in vocational education, whereas proportionately more in agricultural and health occupations education left. The two groups did not differ significantly in terms of gender, education upon entering vocational education, or roles occupied within vocational education. Experienced teachers took part in substantial amounts of professional development during the 5-year period of the study. (A 57-item bibliography and the questionnaire are included.) (YLB)

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Minnesota Research and Development Center for Vocational Education

A Career and Professional Development Follow-Up of Experienced Postsecondary Vocational Teachers

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A Career and Professional Development Follow-Up of Experienced Postsecondary Vocational Teachers

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June 1989

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CHAPTER 1

INTRODUCTION

Statement of the Problem

This study was designed to gather data about the career and professional development of experienced postsecondary vocational education instructors of the Technical Institutes (TIs) of Minnesota. It investigated instructor activity during the five years following at least eight years of experience. Career development was defined as entry into, job changes within, and exit from vocational education. Professional development was defined as formal and informal experiences designed to prepare or upgrade a person's competence in relation to job roles within vocational education. The major goals were (a) to describe the movement of experienced instructors in, out of, and within vocational education; (b) to identify the ways in which they maintained their pedagogical and technical competence; and (c) to identify factors related to instructor turnover.

Turnover among qualified instructors has been a concern within vocational education. Bryant (1980) found that over half of those who were prepared as agricultural education teachers between 1963 and 1977 never taught, and over 50% of the graduates who entered teaching subsequently left the field for other occupations. Therefore, only one-fourth of the graduates were still in teaching after 15 years. Statistics compiled by the

Minnesota State Department of Education (Delgehausen, 1986), however, indicated that only approximately 4% of the regular day-school instructors left TI teaching each year. This suggests that the teacher population within the TIs has been quite stable. Although the turnover rate is moderate, replacing the teachers who leave with other highly qualified teachers requires a substantial investment. This study was concerned with gaining a better understanding of the career and professional development of the experienced instructors as a basis for possibly reducing the turnover rate among them.

While low turnover can be viewed as positive, it also can have the effect of limiting the influx of people with new ideas into educational institutions. Therefore, with the large number of people who remain in teaching within the TIs for long periods of time, the study was also concerned with how the experienced instructors maintained their pedogogical and technical competence.

The study was conducted in the context of two theoretical models related to career development. The first is the theory of work adjustment developed by Dawis, Lofquist and Weiss (1968) at the University of Minnesota. That theory suggests people stay in jobs if those jobs are consistent with their abilities and needs. If a person's job is inconsistent with her/his abilities or needs, the person has a high probability of leaving due to personal dissatisfaction or inadequate performance. Tenure, therefore, is viewed as the result of a correspondence between

the individual's abilities and needs on the one hand, and the ability requirements of the job and the extent to which the job can satisfy the individual's needs on the other.

The second contextual model is that proposed by McKenna (1982). That model suggests that people's career development progresses through five stages and that their perspectives and dispositions concerning their jobs change as they progress through these stages. These changes in turn influence their views of their jobs and professional development needs. McKenna suggests that stage one occurs during the first three years of professional teaching. This stage is characterized by enthusiasm, idealism, and efforts to fit into existing patterns of operation. Stage two is primarily characterized by a sense of stress as the educator seeks to acquire continuing employment status, recognition from peers, and a chance for further advancement.

During stage three, vocational educators face mid-career issues. In stage three teachers may begin to feel dead-ended if they perceive themselves as having either plateaued or having become stagnant in terms of salary or career advancement. On the other hand, teachers who have continued to progress in terms of professional development may feel a greater sense of security and job satisfaction than teachers in stage two.

Stage four may also be called the pre-retirement stage. In this stage, individuals may have reached the top of their profession or rank. Depending upon how far they are toward

retirement, they may feel either a lack of professional challenge and job satisfaction, or a sense of relaxation and career satisfaction. McKenna suggests that generally, when one is more than five years from retirement, there is a tendency to feel more dissatisfied if they are in stage four.

Stage five is the retirement stage. It can be characterized by either a sense of dissatisfaction or a sense of contentment, depending upon how well one has planned for this period.

The two models suggest that factors affecting job satisfaction impact a person's reflections on teaching as a profession and on continuing in that profession. They also suggest that factors affecting satisfaction change as teachers mature in the profession. If the factors affecting satisfaction continue to remain compatible with the teaching profession, people would be expected to remain in the profession. If those factors do not remain compatible, they would be expected to leave.

The two models also suggest that the nature of professional development activities change as people progress through the career development stages. They suggest that experienced teachers might be focused on self-actualization in addition to professional and technical skill building. McKenna suggests that people who continue with their professional development may feel a greater sense of security and job satisfaction than those who do not.

This study focused on following up experienced teachers during the five years after they taught at least 8 to 12 years. The group that stayed in vocational education during the five years had between 13 and 17 years of experience. The group that left could have had between 8 and 17 years of experience, depending upon when they left. According to the McKenna model, most of these experienced teachers were in the fourth stage. Some may have also been in the third and fifth stages.

Major Research Questions

Career Development

1. Are there significant differences between experienced teachers who stay in vocational education vs. those who leave in terms of:
   a. Demographic variables
      1) Age at entry to vocational education
      2) Gender
      3) Education prior to entry to vocational education
      4) Vocational education field membership
   b. Factors which attracted them to vocational education
   c. Vocational education roles upon entry to vocational education
   d. Last role within vocational education
2. For those who stay, are there differences between what originally attracted them to vocational education and what motivated them between 13 and 17 years later?

3. For those who left

   a. Why did they leave?

   b. What did they do?

Professional Development

4. How much professional development did experienced teachers engage in during the last five years in terms of:

   a. Credit courses and degrees

   b. Non-credit courses and sponsors

   c. Work experience

CHAPTER 2

REVIEW OF THE LITERATURE

The first section of the literature review examines reasons why individuals have entered education. It provides a context within which to view what attracts people to vocational education.

The second section of the review examines the concept of teacher career development and studies dealing with the career patterns and career perceptions of teachers. This section is relevant to understanding the career development of people who enter vocational education.

The third section examines issues related to teacher turnover. This provides a context for why teachers decide to leave vocational education.

Reasons for Entering Vocational Education

A study by Bergsma and Chu (1981) examined the reasons that college senior education students had for wanting to enter education. They compared the reasons with those that had been identified in several earlier studies. They wanted to provide a trend analysis to determine whether motivations for entering education were changing, and if so, in what direction. The authors found that students in the 1980s were more interested in the intrinsic rewards of teaching than were students in the earlier studies. The primary motivation of students in the 1980s

was altruistic. Students were well aware of the lack of teaching positions and low salaries. Their primary reasons for entering teaching were liking children and wanting to help the educational system. There was less tendency for students in the 1980s to be interested in teaching as a result of "outside influences," i.e., peers, teachers, and family influences.

The conclusion that individuals in the 1980s were choosing careers in education for altruistic reasons is also supported by findings from a study of pre-service and in-service teachers conducted by Page and Page (1981). Among the reasons listed by subjects in this study for entering education were the contributions that they could make to humanity.

Cheek, McGhee and West (1983) conducted a study to identify predictors of whether a student will teach after graduating from a teacher preparation program and whether the predictors would provide a practical means of determining which students would actually enter vocational education. The factors they examined included six demographic and academic variables derived from the Tennessee Self-Concept Scale, the Work Value Inventory, and the Purdue Student-Teacher Opinionnaire. They found little support for using any of these instruments as a practical means of screening applicants. They concluded that "it may be impractical on the basis of demographic, self-concept, work values, and morale measures to pre-screen agricultural education students into those likely to teach and those not likely to teach" (p. 59).

Teacher Career Stages

Super (1957) suggests that career stages are rooted in life stages. Buchler (1968) defined five psychological life stages; namely, (a) the "growth stage" (ages 0-15 yrs.), (b) the "exploratory stage" (ages 15-25 yrs.), (c) the "establishment stage" (ages 25-45 yrs.), (d) the "maintenance stage" (ages 45-65 yrs.), and (e) the "decline stage" (ages 65 yrs. and over). Miller (1951) developed a parallel five-stage model related to careers. Those stages were (a) preparatory work period (general childhood experiences), (b) initial work period (preteen and teen years; part-time and occasional jobs), (c) trial work period (first full-time jobs; career exploration), (d) stable work period (general career activities between ages mid-twenties to sixties), and, lastly, (e) retirement.

Most of the theories pertaining to teacher career development appear to be adapted from the work of Gould, Buhlers and Levinson (Newman, Dornburg, Dubois, & Kranz, 1980). The central tenet upon which these adaptations are based is that there is an interaction between how long a person has been teaching and their professional motivation and personal development. The literature has referred to the more predictable periods in an individual's development as either stages or transition periods. Despite the great deal of attention that has been paid to the subject of teacher career development, Christensen, Burke, Fessler and Hagstrom, (1983) note that there is still limited knowledge about the needs of teachers at any

given stage of development. Furthermore, the models that do exist vary greatly in perspective and comprehensiveness.

A variety of models have been proposed to explain these stages (Christensen, et al., 1983; Lowther, 1977; Newman, et al., 1980; Watts, 1980; McKenna, 1982). For example, Watts (1980) describes the teacher development process in three stages from the point of entry into teaching until mastery of the teaching role: the "survival" stage, the "middle" stage and the "mastery" stage. The survival stage is characterized by some measure of insecurity, feelings of inadequacy and extremely high self-expectation. It is a time when the beginning teacher needs reassurance, practical advice and time to develop. The middle stage is characterized by increasing confidence, a sense of order and a better overall grasp of the work associated with the career. The mastery stage is a period of quiet ease, confidence and competence in the career role. It is a time when one looks for increased responsibility and opportunities for mentorship. Watts did not specify age or years of experience on the job which could serve as boundaries for the career stages.

Research by Burden (1982), based on the perceptions of elementary school teachers in Ohio, supports the concept of three distinct career stages. However, the timing for the transition between stages is shorter than most other models. Burden found that the first stage corresponded to the first year of teaching. The second stage spanned the second through fourth years of teaching. The third stage began with the fifth year of teaching

to retirement. Teachers described different characteristics during these identifiable periods in their careers.

McKenna (1983) developed a five-stage model which describes the full career of a teacher from beginning as a teacher until retirement. McKenna's model was the most comprehensive of those reviewed, and therefore was used as a basic element in the framework of this study. This model expands the three major stages most often described in the literature into five stages. The stages of McKenna's model were described in the introduction to this study.

Research into the problems and difficulties encountered by teachers also supports the concept of career stages and that the problems encountered by teachers change at various stages (Adams, 1982). Using data obtained from the Western Kentucky University Teacher Preparation Evaluation Program, Adams examined changes in teachers' perceived problems and concerns over a six-year period. Adams found that teachers at all levels tended to find classroom discipline and student motivation to be major problems, but that difficulties with parents and administrators and concerns about instructional tasks tended to increase over time. This increase in difficulties is somewhat paradoxical since teachers also reported that their self-confidence and teaching behaviors had improved significantly over time.

The various models suggest that each career stage is characterized by unique career concerns, developmental tasks, personal challenges and psychological needs. Levinson, Darrow,

> Teacher job dissatisfaction cannot be explained apart from the ideology of teaching and the nature of its reward structure. In contrast with other professions, teaching possesses no well-defined career hierarchy or major extrinsic incentives such as sizable salaries or stratified power and income schedules based on performance. Society historically has associated teaching with religious and moral concerns, low income, and limited prestige. Accordingly, the profession has elevated service motives above material benefits as the proper motivation for work. (p. 5)

As a result of this emphasis on intrinsic rewards, the authors maintained that educators are placed in a more precarious position regarding "burnout" than those who can measure their success or failure against more concrete objective criteria. Consequently, educators and others in social service fields are more prone to burnout. The Commission suggested that the source of teacher burnout comes mainly from two areas. One is problems within the school environment and the second is external sources. External sources included the attitudes that society has toward teachers and the amount of public respect for teachers. The Commission pointed out that a Gallup Poll conducted in 1980 reported that public attitudes towards teachers had dropped for each of the preceding seven years. However, the 1988 Gallup Poll indicates that public attitudes toward teaching, as reflected by

the numbers of people who would like their children to become teachers, has improved (i.e., 45% in 1983 to 58% in 1988).

Saunders and Watkins (1980) conducted a study of teacher burnout among 1,400 elementary and secondary educators in Huntsville, Alabama. They found that the majority of teachers are, or have been, in an ambivalent state regarding their choice of teaching as a career. Among the major factors which they reported as contributing to job stress were:

1. Motivating students
2. Low salaries
3. Lack of job security
4. Disciplining students
5. Not being able to catch up with the work

White (1979) cites the major reasons for teachers electing to remain in education as satisfaction with helping others and satisfaction with student accomplishment.

Murane, Singer and Willett (1988) have hypothesized a relationship between teaching experience and turnover. They indicate, "Teachers who remain in teaching for 5 years are likely to stay for a great many more, and consequently attrition rates tend to be quite low among experienced teachers until they reach the age where retirement is considered" (p. 23).

CHAPTER 3

PROCEDURES

Population

The population consisted of all of the 451 teachers who were employed for between 8 and 12 years in the Minnesota postsecondary Technical Institutes (TIs) in the central region of the state serviced by the University of Minnesota during the 1981 and 1982 school years as identified through Minnesota State Board of Vocational Technical Education (SBVTE) licensure records. Those same teachers would have had between 13 and 17 years of experience as of the 1986 and 1987 school years when this study was conducted, had they remained in that employment.

Members of the population were sent a first-class letter explaining the study and indicating that they would be sent a questionnaire requesting information on their career and professional development. This letter was also used to verify the addresses of the subjects. Telephone directories and TI records were used to try to identify correct addresses for those whose letters were returned due to an incorrect current address. The final population consisted of only the 394 teachers for which correct addresses could be identified.

The final population of teachers was then sent the study questionnaire. Approximately three weeks later those who had not returned the questionnaire were sent another letter encouraging

them to complete the questionnaire and return it. That letter also included a packet of instant coffee as an incentive and the suggestion that they have a cup of coffee on us while completing the questionnaire. Those who still did not respond were contacted by phone with an appeal to get them to respond. Eventually returns were obtained from 284 subjects which represented a 72% return rate for those whose addresses were identified. No attempts were made to verify that the non-respondents were similar to the respondents in light of the fact that all reasonable procedures were exhausted to reach all members of the population. Therefore, the results of this study must be interpreted in light of the fact that data on non-respondents may have been different.

Respondents were divided into those who were still employed in the TIs during the 1986 and 1987 school years and those who were not. Forty-three of the respondents were no longer in vocational education at the time of the follow-up while 241 were continuing within vocational education. In order to facilitate statistical comparisons of data obtained from these two groups, a random sample of 44 people who remained in vocational education was drawn. Therefore, study results pertaining to a comparison of people who stayed in vocational education during the last five-year period and those who left are based on samples of 44 and 43 respectively. Study results pertaining to the professional development of those who stayed in vocational

education during the last five years are based on the 241 people who were continuing in vocational education.

Instrument Development

An 81-item questionnaire entitled the Career Follow-up Questionnaire was designed to gather data regarding experienced teachers' career and professional development related to vocational education (see Appendix). Career development was defined as entry into, job changes within, and exit from vocational education. Professional development was defined as formal and informal experiences designed to develop or upgrade a person's competence in relation to job roles within vocational education. The questionnaire was also developed to gather data similar to that gathered in an earlier study of non-education degreed beginning teachers within the TIs (Pucel, Jensrud & Persico, 1987) as a basis for eventually comparing the career and professional development of beginning and experienced teachers.

The majority of the questionnaire items were forced-choice items. An "other" category, which allowed subjects to write in other alternative responses, was included in each item for which the categories were not exhaustive.

Validity

An advisory committee composed of two vocational teacher educators from the University of Minnesota, two experienced TI instructors, one local TI staff development coordinator, and the person in charge of staff development for the Minnesota SBVTE was assembled. They met to review the objectives of the study and

the individual questionnaire items designed to gather data relative to the objectives. Based on their suggestions, the questionnaire was revised and pilot tested with graduate students in vocational education at the University who had previously been TI instructors.

Reliability

Thirty of the respondents to the original questionnaire were randomly sampled one month after returning the original questionnaire to be part of an investigation of the reliability of the instrument. Twenty-one of those respondents, or 70%, returned the second questionnaire. Data obtained from the first administration of the questionnaire were correlated with data from the second administration. Due to sub-samples completing different items within the questionnaire, sufficient data were not available on all 81 items. Reliability information was calculated on the 37 items to which at least 15 people responded. Reliability coefficients for 57% of those items ranged between 1.00 and .71, 32% ranged between .70 and .41, and 11% ranged between .40 and .11. The reliability coefficients suggested that the responses obtained to the questionnaire which required a reflection back on the past were not as stable as items which were factual, such as amount of education and items concerning their current status.

Data Analysis

Data were analyzed using ANOVA and Chi-square analysis. Significance was established at the .05 level. This means that

differences which were defined as significant would be expected to occur by chance only 5 times out of 100.

CHAPTER 4

RESULTS

The results are reported in two parts. Both present data on experienced teachers during the five years following at least eight years of experience. The first presents the career development of the respondents into, within and out of vocational education. These results focus on (a) the differences between those who stayed in vocational education during the last 5 years and those who did not, (b) contrasting the importance of factors currently motivating those who stayed with those factors that attracted them to vocational education, and (c) what factors contributed to people leaving vocational education and what are they currently doing. The analyses regarding career development were conducted on the 43 people who left vocational education and a similar sample of 44 people who stayed in vocational education.

The second part provides information on the professional development of people who stayed in vocational education during the last five years. That part presents professional development in terms of credit courses and degrees, non-credit courses, and on-the-job experience. The analyses regarding professional development were conducted on the 241 people who were identified as remaining in vocational education.

Comparison of Characteristics Upon Entry of Those Who Stayed and Those Who Left Vocational Education

This section describes and compares the demographics and career development patterns of experienced teachers who stayed in vocational education and those who left as they moved into, within and out of vocational education. The primary goal was to determine if there were systematic differences between those who stayed and those who left.

Age

There was a significant difference in the ages of those who stayed and those who left vocational education at the time they entered vocational education. The mean age of the group that stayed was 32.9 years while the mean age of the group that left was 36.4 years. This can partially be explained by the fact that some of the people who left retired upon achieving retirement age. However, after retirees were removed from the analysis the mean age of those who left was still greater (35.6), although the difference in ages between those who stayed and those who left was no longer significant.

Gender

There was no significant difference in the distribution of males and female who stayed versus those who left. Seventy-four percent of the total group were males and 26% females.

Education

There was no significant difference between those who stayed and those who left in terms of their education prior to entering

vocational education. Ninety-three percent of the total group of experienced teachers had high school diplomas, 39% had vocational school diplomas and 66% had at least a four-year college degree. Forty-two percent of those with college degrees had them in education.

Factors Important in Attracting People to Vocational Education

Teachers who stayed in vocational education and those who left were asked to indicate which of 11 factors were most important in originally attracting them to vocational education. These factors were originally developed as variables related to job satisfaction as part of the Theory of Work Adjustment by Dawis, Lofquist and Weiss (1968). Those factors are presented in Table 1 along with the mean ratings of each group on each factor and the level of significance of the difference between the two groups. Teachers were asked to rate the importance of each factor on a 1 to 5 Likert type scale with 5 being high.

There were significant differences between the groups in terms of two factors which attracted them to vocational education. They were work environment and working with students. In both cases the experienced teachers who stayed in vocational teaching rated these factors as being more important in attracting them to vocational education.

First Roles and Last Roles Within Vocational Education

There was no significant difference in the roles which people who stayed in vocational education had upon entry to

Table 1

Factors Which Attracted
Those Who Stayed and Those Who Left Vocational Education

Factor	Means		F	Sig. Level
	Stayed	Left		
Salary	3.47	3.00	3.39	.066
Fringe benefits	3.33	3.02	1.44	.232
Work environment	4.10	3.65	4.53	.034*
Work with students	4.70	4.43	4.05	.045*
Sharing knowledge	4.37	4.59	1.70	.193
Less stress	2.42	2.49	.06	.799
Career advancement	2.83	2.81	.00	.946
Work schedule	3.47	3.56	.11	.741
Job security	3.31	3.10	.53	.525
Control of work	3.68	3.60	.13	.717
People work with	3.60	3.59	.00	.967

* $p<.05$

vocational education as compared with those who left vocational education. Eighty-one percent of the total group entered as instructors, 4% as instructional assistants, 7% as related subjects instructors, 4% as supervisors, 3% as administrators and 1% as general support staff. There was also no significant difference between the roles people who stayed in vocational education had when followed up and the last roles people who left vocational education had when they left. Seventy-three percent of the total group were instructors, 5% related subjects

instructors, 15% supervisors, 5% administrators, and 2% support staff. Although there was an increase in the numbers of people who had supervisory or administrative positions between the first and last roles, a correlation analysis of the relationship between those roles revealed no statistically significant change.

Vocational Field Membership

Although the numbers of people in each of the fields was too small to calculate formal statistics, there appears to be a relationship between vocational field membership and staying in versus leaving vocational education. The percentages of people who stayed and left in each vocational field are presented in Table 2.

Table 2

Attrition by Vocational Field (N=85)

Area	Stayed		Left	
	Number	Percent	Number	Percent
Agriculture	0	0.0%	4	9.3%
Business & Office	6	14.3%	2	4.7%
Technical	14	33.3%	12	30.2%
T & I	12	28.7%	5	11.6%
Home Economics	3	7.1%	4	9.3%
Health Occupations	4	9.5%	14	32.6%
Marketing	3	7.1%	1	2.3%

Proportionately more people stayed in business and office and T&I education while proportionately more left agriculture and health occupations education.

Comparison of the Importance of Factors Which Motivated People to Enter Vocational Education With Factors Which Are Currently Important To Their Staying

Teachers who stayed in vocational education were asked to rate the importance of factors which might have attracted them to vocational education upon entry, and factors which were important to them after being in vocational education between 13 and 17 years. The same factors were used in both ratings. Salary, fringe benefits, work schedule, job security, control of work, and co-workers became significantly more important while sharing knowledge became significantly less important. The most dramatic shift was the reduction in the importance of sharing what they know. These results suggest a significant shift from the intrinsic aspects of teaching to the extrinsic aspects of employment. Table 3 presents these results.

Factors Which Contributed to People Leaving Vocational Education and Their Current Activities

Factors Which Contributed to People Leaving Vocational Education

Table 4 presents the importance of a number of factors which may have contributed to people leaving vocational education. They were rated by those who did not leave due to retirement. None of the factors were rated very highly on the scale from 1 to 5. The most important factors for those who did not retire

Table 3

Comparison of the Importance of Satisfaction Factors Upon Entry and at Follow-Up For the Group That Stayed (N=41)

Factor	Mean at Entry	Mean at Follow-Up	T-Value	Sig. (two-tailed)
Salary	3.48	4.21	4.84	.00*
Fringe benefits	3.33	4.23	5.47	.00*
Work environment	4.10	4.24	1.00	.33
Work with students	4.70	4.53	1.31	.19
Sharing knowledge	4.34	1.82	11.37	.00*
Stress in Vo. Ed.	2.41	2.76	1.59	.12
Career advancement	2.83	2.78	.27	.78
Work schedule	3.47	3.98	2.84	.01*
Job security	3.31	3.71	2.20	.03*
Control of work	3.68	4.12	3.35	.00*
Co-workers	3.60	3.86	2.05	.04*

* $p<.05$

were (a) wanted a job change, (b) stress, (c) co-workers, and (d) work environment. The least important reasons for leaving were (a) family reasons, (b) did not like vocational education, (c) fringe benefits, and (d) students.

Activities of Those Who Left Immediately After Leaving

Table 5 presents a list of activities to which people who left vocational education went. The majority went into private industry or became self-employed.

Table 4

Importance of Factors in the
Decision to Leave Vocational Education (N=29)

Factor	Mean	Rank
Salary	2.31	9
Fringe benefits	1.90	11
Work environment	2.61	4
Career advancement	2.38	6
Work schedule	2.48	5
Co-workers	2.72	3
Stress	2.80	2
Position eliminated	2.36	7.5
Students	2.10	10
Did not like vocational education	1.46	13
To maintain occupational competence	2.36	7.5
Wanted a job change	2.86	1
Family reasons	1.63	13
Retirement (N=12)		

Professional Development

This second portion of the results provides information on the professional development of the 241 people who stayed in vocational education during the last five years. It presents professional development in terms of credit courses and degrees, non-credit courses and non-credit course sponsors, and on-the-job experience.

Table 5

Activities of Those Who
Left Immediately After Leaving

Activity	Number	Percent
Went into private industry	14	34
Went into public sector employment	3	7
Became self-employed	15	37
Became a homemaker	2	5
Was between jobs	0	0
Attended school	0	0
Went into military	--	--
Other (mainly retired)	7	17
	41	100

The vast majority of the teachers took part in professional development activities. Ninety percent took part in credit or non-credit courses in instructional methodology, 97% took part in credit or non-credit courses to upgrade their technical skills, 45% took part in credit or non-credit courses in educational administration or supervision and 86% took part in other education-related courses. Sixty-four percent of all of the teachers took part in some on-the-job experiences during the five years.

Credit Courses

Table 6 presents the number of people who took part in various numbers of credit courses pertaining to instructional methodology, technical updating, educational administration and

Table 6

Participation in Credit Courses
During Last Five Years (N=239)

Type	Number of Courses				
	0	1-4	5-8	9-12	More than 12
Instructional Methodology	84 35%	121 51%	22 9%	8 3%	4 2%
Technical Updating	77 32%	102 43%	25 11%	13 5%	22 9%
Ed., Admin. and Supervision	150 63%	77 32%	8 3%	2 1%	2 1%
Other Education Related	107 45%	105 44%	16 7%	5 2%	6 2%

supervision, and other related education courses during the most recent five-year period. The majority took part in one or more courses in each area except educational administration and supervision.

Degrees

Table 7 presents the number of people who applied their credit courses toward a degree, and the types of degrees toward which they were applied. Twenty-five percent (59) of the people indicated that they applied their courses toward a degree. The largest numbers applied them toward bachelors and masters degrees. Twenty-five of the 59 (42%) said they completed a degree within the five-year period.

People who stayed in vocational eduction were asked whether they perceived any advantage of having a degree in vocational

Table 7

Courses Applied Toward a Degree and Degrees Obtained During Last Five Years (N=236)

	Applied (N=59) 25%	Not Applied 75%
Type of Degree		
AS/AA	7%	
BS/BA	32%	
MS/MA	44%	
Ed.D/Ph.D.	10%	
Other	7%	

education over not having a degree. Eight categories of possible advantages were presented. Table 8 presents the numbers and

Table 8

Perceived Advantages of a Degree in Vocational Education (N=239)

Factor	Number	Percent
Job security	75	31
Opportunity for advancement	182	76
Acceptance by other staff	48	20
Salary	120	50
Fringe benefits	32	13
Teaching competence	77	32
Type of people at work	36	15
Type of work I can do	79	33

percentages of the people who perceived a degree as having each potential advantage. The major advantages perceived were opportunities for advancement and salary. The least perceived advantage was fringe benefits.

Non-Credit Courses

Participants were also asked to indicate the numbers and types of non-credit courses they took part in during the most recent five years and the sources of those courses. Table 9 presents the numbers and types of courses and Table 10 presents numbers of courses taken from different sources. Again, as with credit courses, the majority of the people took part in non-credit courses in instructional methodology (76%), technical updating (95%), and other education-related courses (69%). Thirty-seven percent took part in non-credit courses in

Table 9

Participation in Non-Credit Courses During Last Five Years (N=239)

	Number of Courses				
Type	0	1-4	5-8	9-12	More than 12
Instructional Methodology	57 24%	117 49%	43 18%	16 7%	6 2%
Technical Updating	12 5%	75 31%	63 27%	31 13%	58 24%
Ed., Admin. and Supervision	150 63%	77 32%	9 4%	3 1%	0 0%
Other Education Related	75 31%	118 50%	32 13%	7 3%	7 3%

Table 10

Sponsors of Non-Credit Courses (N=239)

Sponsor	Number of Courses				
	0	1-4	5-8	9-12	More than 12
Business and Industry	38 16%	85 35%	52 22%	30 13%	34 14%
State/Government	113 47%	90 38%	27 11%	6 3%	3 . 1%
School District	50 21%	101 42%	50 21%	27 11%	11 5%
Private Consultants	148 62%	68 28%	16 7%	4 2%	3 1%
College/University	123 52%	82 34%	22 9%	8 3%	4 2%

educational administration and supervision. The major providers of non-credit courses were business and industry and school districts. Fewest people took non-credit courses from private consultants.

Related Work Experience

People who stayed in vocational education were asked to indicate the number of months of related work experience they had during the last 5 years. No differentiation was made in terms of part-time or full-time work experience. Table 11 presents the amount of work experience reported by people in all roles. Thirty-six percent of the people reported no related work experience during the five years while 22% indicated 49 months or more. When data were analyzed for only the instructors of

occupational programs, the number who had not taken part in any on-the-job experiences was 38%.

Table 11

Total Number of Months
of Related Work Experience During Last Five Years

Months	Number	Percent
0	87	36
1-12	72	30
13-24	15	6
25-36	8	3
37-48	6	3
49-60+	53	22
	241	100

CHAPTER 5

CONCLUSIONS

Career Development

The career development patterns of experienced teachers who stayed in vocational education and those who left were found to be significantly different on a number of variables. The group that stayed in vocational education was significantly younger when they entered vocational education (mean age = 32.9) than the group that left (mean age = 36.4). When retirees were removed from the group that left, the mean age for that group was still greater although the difference was no longer significant. This finding suggests that people who enter vocational education at a younger age have a greater potential for remaining in the field.

The two groups differed significantly on two factors which attracted them to vocational education. The group that stayed in vocational education rated both the work environment and the opportunity to work with students as significantly more important factors. This suggests that new teachers who find the environment of educational institutions and working with students most attractive may have the highest probability of staying in teaching.

Vocational field membership was found to be significantly related to attrition from vocational education. Proportionately more people who were in business and office and T&I education

remained in vocational education while proportionately more people in agricultural and health occupations education left. Although the study did not provide data regarding why different proportions would be leaving the various vocational fields, this may be due to a larger array of other employment opportunities available to people in agriculture or health occupations.

The experienced teachers who stayed in vocational education and those who left did not differ significantly in terms of gender, education upon entering vocational education, or roles they occupied within vocational education. Males and females left in proportionately the same numbers. About 93% of both groups had high school diplomas, 39% had vocational school diplomas, and 66% had at least four years of college. Forty-two percent had degrees in education. Members of both groups had similar distributions of the first roles and last roles within vocational education. Although the last roles of more people in both groups were in supervisory and administrative positions, the increase was not significant.

The relative importance of factors related to the needs of people who stayed in vocational education changed significantly from the time they entered. Salary, fringe benefits, work schedule, job security, control of work, and co-workers became significantly more important while sharing knowledge became significantly less important. These results suggest a major shift from the intrinsic aspects of teaching to the extrinsic aspects of employment. These results are consistent with

McGenna's model which indicates that when people originally enter teaching they can be characterized by enthusiasm, idealism, and efforts to fit into existing patterns of operation and that later in a person's career they tend to be characterized by a greater sense of security and job satisfaction. They are also consistent with the Georgia Professional Standards Commission (1980) report which suggested that the profession of education has elevated service motives above material benefits as the proper motivation for work and that as a result of this emphasis on intrinsic rewards, educators are placed in a more precarious position regarding "burnout" than those who can measure their success or failure against more concrete objective criteria. Consequently, it may be reasonable for vocational educators to shift their emphasis from the intrinsic to the extrinsic aspects of teaching with experience. They tend to master the process of teaching and may feel little freedom in modifying their jobs; therefore, they turn to other external aspects of employment as a basis for satisfaction.

The most important factors which contributed to a person leaving vocational education for those who did not retire were (a) wanted a job change, (b) stress, (c) co-workers, and (d) work environment. Evidently, the group that left vocational education did not feel they could satisfy these needs within vocational education. Therefore, consistent with the theory of work adjustment (which indicates that if jobs are perceived as satisfying people's needs they will stay in the jobs and if they

do not people will leave the jobs), they left. It appears that the group that stayed in vocational education found they could satisfy their needs while the group that left found they could not. The majority of the people who did not retire went into private industry or became self-employed.

Professional Development

The vast majority of experienced teachers who stayed in vocational education took part in both credit and non-credit courses in instructional methodology, technical updating and other education-related courses during the last five years. About one-third of the people took part in credit or non-credit courses in educational administration and supervision. The major providers of non-credit courses were business and industry and school districts. The fewest people took non-credit courses from private consultants.

Twenty-five percent of those who took part in credit courses applied those courses toward a degree, primarily a bachelors or masters degree. Forty-two percent (25) of those people said they had completed a degree within the last five years. The teachers felt that the major advantages for having a degree in vocational education were salary and opportunity for advancement.

About 64% of the people took part in some full- or part-time work experience related to their teaching during the last five years. However, 38% of the people who were teaching occupational programs had not reported any related work experience during the last five years.

Summary and Implications

Summary

It appears that age upon entering vocational education, factors which attracted people to vocational teaching, and vocational field are significantly related to turnover among experienced vocational teachers. It also appears that gender, prior education, and roles held within vocational education are not related to turnover among these experienced teachers.

There are changes in the importance of the needs which teachers expect to have satisfied through teaching between the time they enter vocational education and after 13 to 17 years of experience. The shift seems to be toward the extrinsic, concrete rewards of employment (e.g., salary, work schedule) and away from intrinsic rewards (e.g., sharing knowledge). People tend to leave vocational education because they want a job change, stress, co-workers and the work environment. Those who leave evidently feel they cannot accommodate these needs within vocational education. However, they rate dissatisfaction with vocational education and students low among factors for leaving.

Experienced teachers take part in substantial amounts of professional development during a five-year period. That professional development includes credit and non-credit courses and work experience. The majority feel there are employment advantages of having a degree in vocational education. However, 38% of the people teaching occupational programs participated in no related work experience during the five-year period.

Implications

This study identified significant relationships between a number of factors and experienced TI instructor turnover. That information might be used as the basis for counseling prospective teachers and/or teachers who are considering leaving vocational education. An awareness of such factors opens opportunities for avoiding or compensating for situations with may cause instructor turnover.

This study revealed that experienced instructors are taking part in substantial amounts of professional development activity. However, it also revealed that a large number have participated in no related work experience during the five-year period. If related work experience is considered desirable, new procedures and/or incentive systems may need to be developed to facilitate work experience activity.

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APPENDIX

Career Follow-Up Questionnaire

CAREER FOLLOW-UP QUESTIONNAIRE

Section A: **These Questions Pertain To When You Entered Vocational Education**

1. Check the highest level of formal education you had in each of the following three areas when you first entered employment in vocational education.

HIGH SCHOOL	COLLEGE
__ No high school	__ No college
__ Some high school	__ Some college
__ High school diploma	__ 2 year degree
	__ 4 year degree
VOCATIONAL SCHOOL	__ Some graduate school
__ No vocational school	__ Masters degree
__ Some vocational school	__ Doctorate
__ Vocational school diploma	__ Other: (Specify): _____

2. Did you have a degree in Education specifically?

__ Yes (Specify degree)

___ AS/AA ___ BS/BA ___ MS/MA ___ EdD/PhD ___ Other

__ No **(Skip to question # 3)**

Was the degree in a vocational field? (Agriculture Ed., Home Economics Ed., etc)

___ Yes ___ No

3. What was your age when you entered vocational education? _____ yrs.

4. Your gender: ___ Male ___ Female

5. What attracted you to vocational education? On a scale of 1 to 5, with 1 = not very important and 5 = very important, indicate how important each of the following factors was in attracting you to vocational educaton.

1 2 3 4 5	Salary
1 2 3 4 5	Fringe benefits
1 2 3 4 5	Work environment
1 2 3 4 5	Working with students
1 2 3 4 5	Sharing what I know
1 2 3 4 5	Less stress in vocational education
1 2 3 4 5	Career advancement
1 2 3 4 5	Work schedule
1 2 3 4 5	Job security
1 2 3 4 5	Ability to control what I do
1 2 3 4 5	Type of people I could work with
1 2 3 4 5	Other (Specify) _____

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Section B: **These Questions Pertain To The Time You Spent In Vocational Education**

6. Indicate how many years you have taught at each of the following levels of vocational education?

   __ Secondary
   __ Postsecondary
   __ Adult Extension

7. Indicate the roles you have held in education and the sequence in which they were held. Place a "1" to indicate the first, "2" the second, etc. **NOTE:** It is possible that you may have occupied the same role more than once. If so, more than one number can occur on a sequence line indicating different time periods.

   Next, indicate the total years of experience you have had in each role.

Sequence	Yrs. Exp.	Roles
___	___	Instructional assistant
___	___	Related instructor (e.g., related math, communications)
___	___	Instructor (including lead instructor)
___	___	Supervisor (e.g., department head)
___	___	Administrator (e.g., assistant director)
___	___	Support staff (e.g., counselor, financial aids)
___	___	Other (Specify: _____ _____)

8. If you entered vocational education in an instructional role, what was your technical specialty?

   _____ (indicate technical specialty)

   ___ (check here if you did not enter vocational education in an instructional role)

9. Do you have a current vocational teaching license? ___ Yes ___ No

10. Are you currently employed in vocational education?

    __ Yes **(Continue with question # 11)**

    __ No **(Skip to question # 28, page 6)**

11. What was your role in vocational education five years ago?

__ Instructional assistant
__ Related instructor (e.g., related math, communications)
__ Instructor (including lead instructor)
__ Supervisor (e.g., department head)
__ Administrator (e.g., assistant director)
__ Support staff (e.g., counselor, financial aids)
__ Other (Specify: _____)

12. Which best describes the vocational educational setting in which you are currently employed?

__ Public __ Private

13. Indicate the number of school districts and/or private vocational education institutions in which you have been employed?

__ School districts
__ Private vocational education institutions

14. Indicate how important each of the following factors is to you at your present career stage on a scale of 1 to 5, with 1= not very important and 5 = very important.

1 2 3 4 5	Salary
1 2 3 4 5	Fringe benefits
1 2 3 4 5	Work environment
1 2 3 4 5	Working with students
1 2 3 4 5	Sharing what I know
1 2 3 4 5	Less stress in vocational education
1 2 3 4 5	Career advancement
1 2 3 4 5	Work schedule
1 2 3 4 5	Job security
1 2 3 4 5	Ability to control what I do
1 2 3 4 5	Type of people I can work with
1 2 3 4 5	Other (Specify) _____

Section C: Please indicate the approximate number of **college credit courses** you have completed in each of the following areas within the past five years. (Check the approximate number of courses taken).

15. In areas related to instructional methodology (e.g., course construction, testing, etc.)

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

16. In areas related to technical updating skills in a content area (e.g., auto mechanics, nursing, etc.)

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

17. In areas related to educational administration or supervision.

__ 0 courses
__ 1-4 courses
__ 5-8 course
__ 9-12 courses
__ more than 13

18. In areas related to education not reflected above

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

19. Were any of the courses you took during the past five years applied towards a degree?

__ No __ Yes (If yes, indicate the type(s) of degree.)

AS/AA ___ BS/BA ___ MS/MA ___ EdD/PhD ___ Other _____

20. Did you complete a degree during the past five years?

__ No __ Yes (If yes, indicate the degree(s) you have completed.)

AS/AA ___ BS/BA ___ MS/MA ___ EdD/PhD ___ Other _____

21. Comparing non-degreed persons with degreed persons in vocational education, do you believe having a degree in vocational education is an advantage in the following areas?

Yes	No	
___	___	Job security
___	___	Opportunities for advancement
___	___	Acceptance by other staff
___	___	Salary
___	___	Fringe benefits
___	___	Teaching competence
___	___	Type of people I can work with
___	___	Type of work I can do
___	___	Other: (Describe) _____

_____

Section D: Please indicate the approximate number of workshops, conferences, seminars, etc., which you have attended within the past five years and which **were not taken for college credit**.

22. In areas related to instructional methodology (e.g., course construction, testing, etc.)

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

23. In areas related to technical updating skills in a content area (e.g., auto mechanics, nursing, etc.)

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

24. In areas related to educational administration or supervision.

__ 0 courses
__ 1-4 courses
__ 5-8 course
__ 9-12 courses
__ more than 13

25. In areas related to education not reflected above

__ 0 courses
__ 1-4 courses
__ 5-8 courses
__ 9-12 courses
__ more than 13

26. For the activities referred to in questions 22 through 25 above, please indicate the approximate number sponsored by each type of agency.

Business/Industry	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+
State/Government	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+
School/District	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+
Private/Consultants	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+
College/Universty	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+
Other	__ 0	__ 1-4	__ 5-8	__ 9-12	__ 13+

27. Indicate your related work experience during the past five years. Indicate the total amount of time you have worked at each job title or occupation. Do not list employers (e.g., if you sold cars and furniture for different employers you would indicate the total amount of months as a "salesperson"). Indicate length of experience in "MONTHS"

1. Job title: _____
   Length of work experience (in months) _____
2. Job title: _____
   Length of work experience (in months) _____
3. Job title: _____
   Length of work experience (in months) _____
4. Job title: _____
   Length of work experience (in months) _____

FOR THOSE WHO ARE STILL IN VOCATIONAL EDUCATION, YOUR PART OF THE SURVEY IS NOW COMPLETED. THANK YOU.

Section E: **These Questions Pertain To Those No Longer In Vocational Education**

28. How many years ago did you leave vocational education? _____ years ago

29. Why did you leave vocational education? On a scale of 1 to 5, with 1 = not very important, and 5 = very important, please indicate how important each of the following factors was in your decision to leave vocational education.

1 2 3 4 5 Salary
1 2 3 4 5 Fringe benefits
1 2 3 4 5 Work environment (inside work, outside work, etc.)
1 2 3 4 5 Career advancement
1 2 3 4 5 Work schedule
1 2 3 4 5 Type of people I could work with
1 2 3 4 5 Stress
1 2 3 4 5 Position was eliminated
1 2 3 4 5 Students
1 2 3 4 5 Did not like vocational education
1 2 3 4 5 To maintain occupational competence
1 2 3 4 5 Wanted a job change
1 2 3 4 5 Family reasons
1 2 3 4 5 Other: (Specify) _____

30. Indicate what you did immediately after leaving vocational education:

___ Went into private employment (e.g., business industry)
___ Went into public sector employment (e.g., government)
___ Became self-employed
___ Became a homemaker
___ Was between jobs
___ Attended school
___ Went into the military
___ Other: (Describe)_____
_____

31. Indicate the types of skills developed in vocational education that transferred to the activity in which you engaged immediately after leaving vocational education. (Check all that apply).

___ Teaching experience was transferable
___ Technical experience was transferable
___ Supervisory experience was transferable
___ Skills learned in handling people were transferable
___ Other: (Describe) _____
_____

FOR THOSE NO LONGER IN VOCATIONAL EDUCATION, YOUR PART OF THE SURVEY IS NOW COMPLETED. THANK YOU.

____